



### Exercise 1

- (a) The slope of this line is

**Multiple Choice:**

- (i) positive because  $y$  is increasing
- (ii) positive because  $y$  is decreasing
- (iii) negative because  $y$  is increasing
- (iv) negative because  $y$  is decreasing ✓

- (b) The slope of this line is  $m = \boxed{-3/2}$ .

**Hint:** Recall that the slope of the line is the rate of change between any two data points on the line,  $m = \frac{\Delta y}{\Delta x}$ .

- (c) The  $y$ -value of the point corresponding to  $x = 0$  is  $b = \boxed{1/2}$ .

- (d) The point-intercept form of the equation of this line is  $y = \boxed{-3/2}x + \boxed{1/2}$ .

- (e) The point-slope form of the equation of this line is  $y - 2 = \boxed{-3/2} \left( x - \boxed{-1} \right)$ .

- (f) The equation of this line in standard form  $\boxed{3}x + \boxed{2}y = 1$ .